

# SEQUENCE LISTING

<110> Boronat, Albert  
Campos, Narcisco  
Kishore, Ganesh M.

<120> Nucleic Acid Sequences Involved in  
Isoprenoid Synthesis

<130> 17142/02/US

<140> Unavailable

<141> 2001-11-13

<150> 09/549,787

<151> 2000-04-14

<150> 60/129,899

<151> 1999-04-15

<150> 60/146,461

<151> 1999-07-30

<160> 13

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 3400

<212> DNA

<213> Arabidopsis sp

<400> 1

cttggttacta	aatgctcagc	gaaatcttta	aaaaatgaca	aaaatctggt	gggtaccatt	60
caaatccaga	ttcctttctt	atcatcatct	ctctctctca	cactgtttat	ctgattcgtc	120
ttctctgata	atcaagagta	gtagtgcggt	tctctggaaa	atattcgatt	tttaaaagac	180
tctgatgatg	acattaaact	cactatctcc	agctgaatcc	aaagctatct	ctttcttgga	240
tacctccagg	ttcaatccaa	tcctaaact	ctcaggtttc	ttcttcttcc	tctcttcttt	300
cctcctcctt	ggtcaactct	cttttcgatt	aaagttgcaa	actttcatta	gttgtcttag	360
gctcttgtga	atttctctat	ctaggtaatc	tggtatttct	tcaattcgat	tttttttggg	420
ttgctttagg	tcgtagagtt	ttaaatttta	catctttgga	gtgtttcaca	ggtgggttta	480
ggtttgaggag	gagggaatcaa	gggagaggtt	ttggaaaagg	tgtaagtgt	tcagtgaag	540
tgcagcagca	acaacaacct	cctccagcat	ggcctgggag	agctgtccct	gaggcgcctc	600
gtcaatcttg	ggatggacca	aaacccatct	ctatcgttgg	atctactggg	tctattggca	660
ctcaggtttt	atttcgatta	aggcattatt	gtgcagttct	tgagtatgac	cagacttta	720
gtttgtctta	tgaatgacta	gactcataga	agaatgat	ttttttctta	ctgagttatt	780
gttgcacat	ttttatcgac	aagaacttcc	attttgcaga	cattggatat	tgtggctgag	840
aatcctgaca	aattcagagt	tgtggctcta	gctgctggtt	cgaatgttac	tctacttgct	900
gatcaggtaa	ggtggcttca	tttgtaaaaa	aattagtatt	gagtctctcc	aatttgtcat	960
tcagaccact	tgggaattcag	tttaattctc	agttcagtgg	tagtatcata	agcaagatag	1020
tattaactcg	ttatgtatca	gatcaaacca	gagaaatcag	gttctgggtt	aggcttttgc	1080
ttctgcaatc	tcaagaaatc	tctatagtat	ggttctgtga	ttctattttg	aatggtggca	1140
ggtaaggaga	tttaagcctg	cattggttgc	tgtagaaac	gagtcactga	ttaatgagct	1200
taaagaggct	ttagctgatt	tggactataa	actcgagatt	attccaggag	agcaaggagt	1260
gattgagggt	agttcatttg	ttagttttga	ttgtagtgt	gatagggttt	tacttattat	1320
gttcatcaac	agggtgccc	acatcctgaa	gctgtaaccg	ttgttaccgg	aatagtaggt	1380
tgtgcgggac	taaagggtata	tactctaatt	ttttgttatt	aaaccttatt	aagaggatat	1440
gaaaaaagaa	agttgcagat	gataaagctt	gttgcttatt	tttactgcag	cctacggttg	1500
ctgcaattga	agcaggaaag	gacattgctc	ttgcaacaa	agagacatta	atcgcaggtg	1560
gtcctttcgt	gcttcgctt	gccaacaaac	ataatgtaaa	gattcttccg	gcagattcag	1620
aacattctgc	catatttcag	gtatcacaaa	tcacatagaa	ttaagtaacct	caactttcat	1680
attgagttca	gcgttgggtc	taatgcaagt	tcaacctctg	gcaatttgag	tgaaaaatct	1740



Ile	Leu	Pro	Ala	Asp	Ser	Glu	His	Ser	Ala	Ile	Phe	Gln	Cys	Ile	Gln
225					230					235					240
Gly	Leu	Pro	Glu	Gly	Ala	Leu	Arg	Lys	Ile	Ile	Leu	Thr	Ala	Ser	Gly
				245					250					255	
Gly	Ala	Phe	Arg	Asp	Trp	Pro	Val	Glu	Lys	Leu	Lys	Glu	Val	Lys	Val
			260						265					270	
Ala	Asp	Ala	Leu	Lys	His	Pro	Asn	Trp	Asn	Met	Gly	Lys	Lys	Ile	Thr
		275					280					285			
Val	Asp	Ser	Ala	Thr	Leu	Phe	Asn	Lys	Gly	Leu	Glu	Val	Ile	Glu	Ala
	290					295					300				
His	Tyr	Leu	Phe	Gly	Ala	Glu	Tyr	Asp	Asp	Ile	Glu	Ile	Val	Ile	His
305					310					315					320
Pro	Gln	Ser	Ile	Ile	His	Ser	Met	Ile	Glu	Thr	Gln	Asp	Ser	Ser	Val
				325					330					335	
Leu	Ala	Gln	Leu	Gly	Trp	Pro	Asp	Met	Arg	Leu	Pro	Ile	Leu	Tyr	Thr
			340					345						350	
Met	Ser	Trp	Pro	Asp	Arg	Val	Pro	Cys	Ser	Glu	Val	Thr	Trp	Pro	Arg
		355					360					365			
Leu	Asp	Leu	Cys	Lys	Leu	Gly	Ser	Leu	Thr	Phe	Lys	Lys	Pro	Asp	Asn
	370					375					380				
Val	Lys	Tyr	Pro	Ser	Met	Asp	Leu	Ala	Tyr	Ala	Ala	Gly	Arg	Ala	Gly
385					390					395					400
Gly	Thr	Met	Thr	Gly	Val	Leu	Ser	Ala	Ala	Asn	Glu	Lys	Ala	Val	Glu
				405					410					415	
Met	Phe	Ile	Asp	Glu	Lys	Ile	Ser	Tyr	Leu	Asp	Ile	Phe	Lys	Val	Val
			420					425					430		
Glu	Leu	Thr	Cys	Asp	Lys	His	Arg	Asn	Glu	Leu	Val	Thr	Ser	Pro	Ser
		435					440					445			
Leu	Glu	Glu	Ile	Val	His	Tyr	Asp	Leu	Trp	Ala	Arg	Glu	Tyr	Ala	Ala
	450					455					460				
Asn	Val	Gln	Leu	Ser	Ser	Gly	Ala	Arg	Pro	Val	His	Ala			
465					470					475					

<210> 3  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide

<400> 3  
 ctctggatgt catatgaagc aactc

25

<210> 4  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide

<400> 4  
 ccgcataaca ccgccaacc

19

<210> 5  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide

<400> 5  
gcacacttcc actgtgtgtg 20

<210> 6  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide

<400> 6  
attcgaacca gcagctagag 20

<210> 7  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide

<400> 7  
ccagtagatc caacgataga g 21

<210> 8  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide

<400> 8  
ggccatgctg gaggaggttg 20

<210> 9  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide

<400> 9  
caagagtagt agtgcggttc tctgg 25

<210> 10  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide

<400> 10  
cagtttggct tgttcggatc acag 24

<210> 11  
<211> 32  
<212> DNA  
<213> Artificial Sequence

0997035-433028650

<223> Synthetic Oligonucleotide

ctgagagtgc accatctgcg gtgtgaaata cc

32

<211> 34

<212> DNA

<213> Artificial Sequence

<223> Synthetic Oligonucleotide

ggcatatggt gaaacccatc tctatcgttg gatc

34

<211> 33

<212> DNA

<213> Artificial Sequence

<223> Synthetic Oligonucleotide

acgaattcat tatgcatgaa ctggcctagc acc

33

**COPIES**